September 23, 2010

Albert R. Axe, Jr.
Winstead PC
401 Congress Avenue
Suite 1200
Austin, TX 78701

RE: Dispute Regarding EPA's Decision Document for the Time Critical Removal Action at the San Jacinto River Waste Pits Superfund Site
Administrative Order on Consent for Time Critical Removal Action
CERCLA Docket No. 06-12-10
San Jacinto River Waste Pits Superfund Site near Pasadena, Harris County, Texas

Dear Mr. Axe:

This letter is in response to your September 10, 2010 letter invoking the Dispute Resolution provisions contained in Paragraph 70 of the Administrative Order on Consent for Time Critical Removal Action (AOC), CERCLA Docket No. 06-12-10, for the San Jacinto River Waste Pits Superfund Site (Site) located in Harris County, Texas. Respondents are contesting the Environmental Protection Agency's (EPA) decision to require a granulated cover that can withstand a storm event with a return period of 100 years to abate the imminent and substantial endangerment identified at the Site until a remedy is selected. Specifically, Respondents' contend that EPA's decision is arbitrary and capricious because it is inconsistent with the National Contingency Plan, EPA's April 2, 2010 Action Memorandum, and the AOC and Statement of Work. The EPA asserts that its decision to require a cover that addresses a storm event with a return period of 100 years is necessary to address documented releases of highly toxic dioxin into the San Jacinto River which may result in an imminent and substantial endangerment to public health and welfare or the environment. The EPA has also asserts that the required action meets the requirements outlined in the National Contingency Plan, the Action Memorandum, and the negotiated AOC in protecting human health and the environment while the nature and extent of contamination is evaluated and a final remedy is selected for the Site.

Section 300.415(a)(1) of the National Contingency Plan (NCP) provides the lead agency with the authority to determine whether a removal action is necessary, and the appropriate extent of a removal action to be taken in response to a given release. It further provides that the determination will be based on a review of the removal site evaluation and the current site conditions. Section 300.415(b) lists factors to be considered in making the determinations. In evaluating whether a removal action was warranted for the waste pits, EPA reviewed the NCP, historical information regarding the Site, existing data for the concentrations within the waste pits, and conducted a removal assessment.

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Evaluation of the waste pits indicated that they contained 2,3,7,8 TCDD (also known as dibenzo-p-dioxin), one of the most toxic forms of dioxin and a listed hazardous substance as defined in CERCLA Section 101(14), 42. U.S.C. § 9601(14), and further defined in 40 CFR § 302.4. Historical sampling results of the pits indicated high levels of dioxin, the highest concentration within the pits coming in at 41,300 parts per trillion. Subsequent sampling of the pits conducted by the Respondents in April 2010, resulted in concentrations which ranged from 100,000 parts per trillion up to 360,000 parts per trillion. The Action Memo dictated that any concentrations greater than or equal to 330 parts per trillion dibenzo-p-dioxin in the sediment within the original 1966 berm placement are considered part of the source area of contamination that has to be addressed with the protective barrier.

In addition to the waste pits containing extremely high concentrations of dioxins, the pits are located in a marshy area partially submerged into the San Jacinto River in Harris County, Texas, an area prone to extreme weather events (e.g hurricanes, tropical storms, tropical depressions, and flooding). Land in the area of the Site is characterized by the Federal Emergency Management Agency as being within the 100 year flood plain requiring flood insurance. As part of the removal assessment, the Remedial Project Manager (RPM) visited the pits and documented grayish waste entering into the San Jacinto River along the Northwest corner of the western pit as well as the eastern pit was 95% under four feet of the water and in direct contact with the San Jacinto River.

According to the NCP, a removal action is appropriate where there is actual or potential exposure of human populations and animals or the food chain from hazardous substances, pollutants, or contaminants. 40 CFR 300.415(b)(2)(i). Evaluating the conditions of the waste pits, EPA found that there was a potential for exposure of human populations and animals to dibenzo-p-dioxins as well as polychlorinated dibenzofurans, listed hazardous substances under CERCLA Section 101(14), 42 U.S.C. § 9601(14), and further defined at 40 CFR §302.4. Releases of dibenzo-p-dioxins and polychlorinated dibenzofurans into the San Jacinto River were documented by the RPM during a Site visit. In addition, surface water and sediment samples collected during the site assessment indicated the presence of dibenzo-p-dioxins and polychlorinated dibenzofurans in the pits. From the removal evaluation and the Site assessment, EPA determined that people and animals that come onto the Site could be exposed to these contaminants through ingestion, skin contact and inhalation pathways. Routes of exposure include, but are not limited to: human direct dermal contact with contaminated sediment or water; human inhalation of contaminated sediment or water; human direct dermal contact with contaminated ecological receptors; human ingestion of contaminated ecological receptor; and ecological bioaccumulation of contaminants at every level of the food web.

The NCP also allows for a removal action where there are high levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate. 40 CFR 300.415(b)(2)(iv). At the Site, EPA found that the waste pits contained high concentrations of both dibenzo-p-dioxins and polychlorinated dibenzofurans were being released into the San Jacinto River. The RPM documented erosion of the western pit into the San Jacinto River. Samples of the western pit for dibenzo-p-dioxins and polychlorinated dibenzofurans concentrations ranged from 513 ng/kg to 23,300 ng/kg. In addition, the RPM documented that the eastern pit is partially submerged and is releasing hazardous substances into the San Jacinto

River. Samples of the eastern pit for dibenzo-p-dioxins and polychlorinated dibenzofurans concentrations ranged from 83 ng/kg to 34,000 ng/kg. Both pits are exposed to the elements with no cap or cover in place to act as a barrier to prevent migration of the dioxin into the environment. In addition, sampling of sediments surrounding the pits indicated that the dibenzo-p-dioxins and polychlorinated dibenzofurans had travelled from the pits to the surrounding sediment at least 100 feet.

The NCP also permits a removal action where weather conditions may cause the release or migration of hazardous substances or pollutants or contaminants. 40 CFR 300.415(b)(2)(v). The EPA found that the pits are located in an area that is prone to weather conditions that may cause the release or migration of dibenzo-p-dioxins and polychlorinated dibenzofurans. The area surrounding the pits receives an average of 50 inches of rain annually. In addition, the area has been and will continue to be susceptible to extreme weather conditions (e.g. storm winds, flooding, tornadoes, and hurricanes). The waste pits may be affected by tides, winds, waves, and currents resulting from these extreme weather conditions which may cause a potential release or migration of dioxin and furan contaminated materials.

Based upon the above listed findings, EPA determined that an actual or threatened release of hazardous substances from the waste pits at the Site and issued an Action Memorandum on April 2, 2010. The EPA further determined that the release and threatened release of dibenzo-p-dioxins and polychlorinated dibenzofurans presented an imminent and substantial endangerment to public health, or welfare, or the environment. The Action Memorandum called for the immediate design and construction of a physical barrier surrounding both the waste pits that address the release or threat of release of dibenzo-p-dioxins and polychlorinated dibenzofurans into the San Jacinto River. In addition, the Action Memorandum required the barrier design and construction to be structurally sufficient to withstand forces sustained by the river and any potential future extreme weather events as well as to be structurally sound for a number of years until a final remedy is designed and implemented.

Upon issuance of the Action Memorandum, EPA negotiated and entered into an AOC to implement the Action Memorandum. Under the terms of the AOC, the Respondents were to draft a technical memorandum analyzing the removal alternatives for the Site that address the imminent and substantial endangerment posed by the pits at the Site. The EPA then reviewed this technical memorandum and received comments from the Texas Commission on Environmental Quality (TCEQ) and the Harris County Public Health and Environmental Services HCPHES). After reviewing EPA guidance, other environmental agency comments, and the Respondents' technical memorandum, EPA issued a decision document calling for a granular cover of the waste pits that was protective for storm events with a return period of 100 years while the nature and extent of contamination is evaluated and a remedy for the Site is selected.

The EPA's decision for a granular cover that is protective for storm events with a return period of 100 years was made after thorough review and analysis of the conditions at the waste pits as well as EPA guidance and historical EPA protocol. Given the dynamic meteorological conditions of the area, the high toxicity of the hazardous substances at issue in the waste pits, and the vulnerability of those hazardous substances to the environment, EPA called for a strong cover that could withstand unusual storm events susceptible to the area until the Site is fully

characterized and a remedy is selected. The EPA's Contaminated Sediment Guidance recommends that the 100 year flow event is the starting point when evaluating the effects of a storm on a cover designed to act as a barrier for containing hazardous substances. Given that the location of the pits are partially inundated by the San Jacinto River, in an area that is prone to extreme weather events, and the dioxin numbers recorded in the pits are extremely high, EPA did not deviate from this standard. According to EPA's engineers, if a storm event occurs that exceeds what the cover is designed for, it is expected that erosion of the pits will occur and the highly toxic dioxin within the pits will again migrate into the San Jacinto River. The potential consequence to human health and the environment of this occurring is too great to justify lessening the design standard. Consultation with TCEQ confirmed that 100 year storm event is an appropriate standard given that that the 100 year storm event is routinely used for design criteria for projects in the Houston region to optimize protection of human health and the environment. In addition, HCPHES also confirmed that projects in the area use the 100 year storm event in their design criteria.

The EPA's decision to recommend a granulated cover designed for a storm event with a return period of 100 years is consistent with removal actions authorized under the NCP. The NCP articulates types of removal actions where there is a release or threat of release of a hazardous substance. Section 300.415(e)(4) expressly states that capping of contaminated soils or sludges where needed to reduce migration of hazardous substances or pollutants or contaminants into soil, ground or surface water, or air is appropriate is an appropriate removal action. The EPA's decision will cap contaminated sludges containing dibenzo-p-dioxins and polychlorinated dibenzofurans, listed hazardous substances, to prevent further migration of these substances into the surrounding soil and ground and surface water.

In addition, EPA's removal action to place a granular cover designed for a storm event with a return period of 100 years contributes to the efficient performance of any anticipated long-term remedial action with respect to the release concerned as required in the NCP. 40 CFR 300.415(d). A Remedial Investigation and Feasibility Study is currently being conducted at the Site. Dioxin is the contaminant of concern at the Site. The granulated cover designed for a storm event with a return period of 100 years was chosen by EPA because it best addressed temporarily the release of dioxins from the waste pits into the San Jacinto River as well as offered the most flexibility in selecting future remedies such as excavation, dredging, and on-site containment. The granular cover designed for a storm event with a return period of 100 years does not preclude a particular final remedy, nor does it adopt a particular final remedy. Whatever remedy is selected, the dioxin within the waste pits will have to be evaluated for treatment given that the NCP creates a preference for treatment to address the principal threats posed by the dioxins in the waste pits. 40 C.F.R. 300.430(a)(1)(iii). In addition, the granular cover designed for a storm event with a return period of 100 years is not considered a permanent remedy because the cover is not being designed to be effective past the selection of the remedy and is unlikely to meet the requirement of long-term effectiveness, a key component for any final remedy selected by EPA. Any type of permanent on-site containment would in all likelihood be designed for a storm event greater than a 100 year period given the highly toxic nature of the dioxin in the waste pits, the vulnerable location of the pits, and the extreme weather events that occur in the vicinity of the pits.

For the above stated reasons, EPA is confident that (a) there is a release or threat of release from the waste pits that present an imminent and substantial endangerment to public health, or welfare, or the environment, (b) the granular cover designed for a storm event with a return period of 100 years is necessary to temporarily abate the release and threat of release of dioxin, (c) the granular cover designed for a storm event with a return period of 100 years is appropriate in protecting human health and the environment given the high concentrations of dioxin and the extreme meteorological conditions of the area, and (d) both the imminent and substantial endangerment finding for the waste pits and the recommended granular cover removal action meets the requirements of the NCP.

If you have any questions concerning this matter, please contact me at (214) 665-2157.

Sincerely,

Barbara A. Nann
Assistant Regional Counsel